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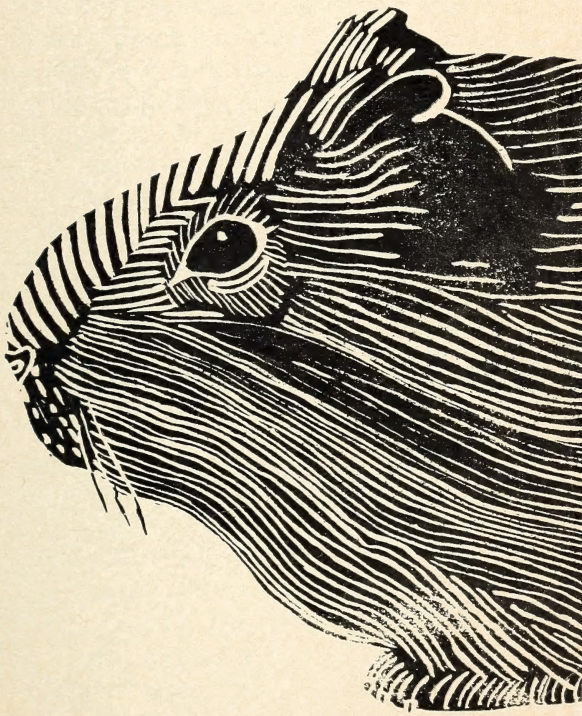
RAISING GUINEA PIGS



Leaflet No. 466

U.S. DEPARTMENT OF AGRICULTURE

RAISING GUINEA PIGS

For almost 100 years, guinea pigs have been used in laboratory work. Because their reactions to different tests are well known, they are valuable in studying disease symptoms and drug effects, standardizing vaccines and serums, and determining vitamin content of foods.

DESCRIPTION

The guinea pig is a rodent that has a short, stocky body, short legs, and no tail. The differences between the principal types are mainly in hair characteristics and color.

The hair of a guinea pig may be smooth and short, rough and short, or silky and long.

Most of the colors seen in guinea pigs are solid—black, chocolate, red, tan, or golden agouti (hair colored in alternate dark and light bands).

Some guinea pigs have fur of mixed colors—agouti, black with red or tan, or the same colors with white spotting. A few other colors have been developed by breeders who supply animals for laboratories.

BUYING AND SELLING

Guinea pigs may be bought from pet stores or laboratory supply houses.[1] Or, for names of dealers and reference books, write to the Institute of Laboratory Animal Resources, National Research Council, National Academy of Sciences, 2101 Constitution Avenue NW., Washington 25, D.C.

Breeding animals usually are sold in pairs, or trios of one male and two females. Breeding guinea pigs are usually more expensive than general laboratory stock.

Producers of laboratory animals usually sell to hospitals, laboratories, or dealers.

Before making an investment, find out whether you can sell laboratory animals in your area. Find out whether guinea pigs are needed or whether other

[1] The Department of Agriculture does not purchase guinea pigs and has no animals for sale or free distribution.

laboratory animals are used. After determining that there is a demand, you can select breeding animals and plan their housing and feeding.

Do not expect to make large profits immediately by raising laboratory animals. Most successful producers have succeeded only after years of patience and experience.

HOUSING

Guinea pig pens may be kept outside in a mild climate. In most areas, they need to be in a heated building. Guinea pigs do not thrive at temperatures below 65° F.

The pens need not be elaborate because guinea pigs usually do not climb, jump, or gnaw on wood. However, most pens do have some sort of screen wire or hardware cloth across the top. The sides may also be made of screen.

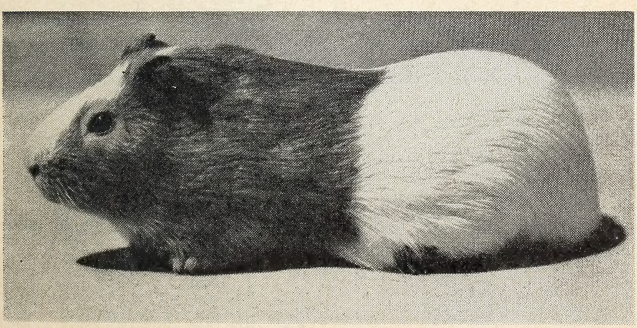
Provide a shelf about 4 inches off the floor in a dark corner of the cage. Females and their litters will seek shelter under the shelf. Guinea pigs like to sleep on a shelf.

Cover the pen floors with wood shavings or straw to absorb moisture. Clean the pen floors at least once a week.

A pen 30 by 36 inches and 12 to 15 inches high is large enough for a male and 5 or 6 breeding females. A larger pen, 5 by 10 feet, can accommodate 30 to 50 guinea pigs.

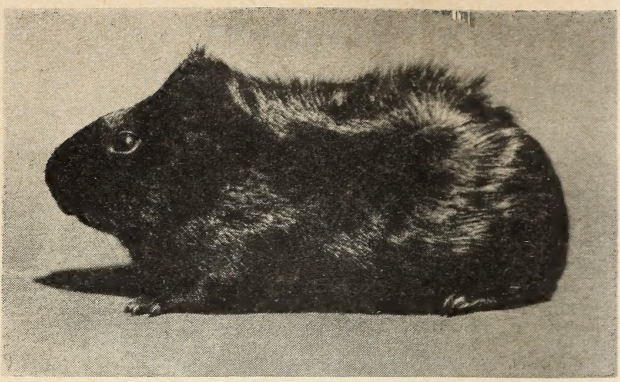
FEEDING

A ration for guinea pigs should contain grain and leafy alfalfa hay or fresh greens. The grain part of



39265–B

Short-haired guinea pig.



33618–B

Rough-haired guinea pig.

the ration may be ground oats and wheat bran, or a ready-prepared ration recommended for rabbits may be used. If a prepared ration is used, it should consist of a mixture of grains and minerals compressed into pellets.

Commercially prepared laboratory chows or dry pellets made especially for guinea pigs are available usually in pet or feed stores. These feeds include complete pellets requiring no addition of vitamin C, but potency of this vitamin can be guaranteed for only short periods.

Fresh hay or greens are necessary in the guinea pig's ration because they supply the animal with vitamin C. Guinea pigs cannot produce their own vitamin C; without it they develop scurvy. The greens may be green cabbage, lettuce, kale, lawn clippings, green alfalfa, or similar plants.

Fresh water should be supplied daily. Or, you can omit water when a plentiful supply of fresh succulent greens can be provided.

Food cups and water bottles should be suspended from cage walls above bedding to prevent contamination by urine and feces.

MANAGEMENT

Breeding

Guinea pigs have young several times a year and it is not difficult to build up a sizable herd within a year or two.

Males become sexually mature when they are about 60 days old. When they are 40 to 50 days old, the

males that are not to be used for breeding should be placed in separate pens.

Female guinea pigs (sows) become sexually mature 30 to 45 days after birth and will breed at this age. Estrus occurs every 14 to 17 days and lasts about 24 hours.

The female comes into heat immediately after giving birth to a litter and usually mates within 10 to 12 hours. To insure regular mating, leave the breeder males and females in the same cage.

The gestation period of the guinea pig is 65 to 70 days. The average litter is three; some litters contain five or more. A vigorous sow may produce four or five litters a year. Guinea pigs produce young until they are 3 years old and may continue until they are 5.

Growth

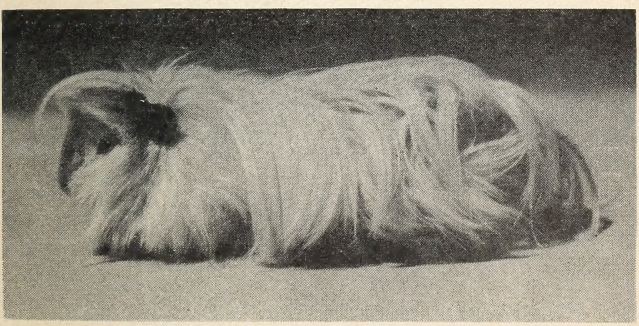
Guinea pigs are vigorous and can care for themselves almost from birth. They are born fully haired, with their eyes open, and with teeth. Within an hour after birth, they begin running around. In 2 or 3 days they eat solid food.

The young should be left with their mother for 3 to 4 weeks.

Young guinea pigs gain weight rapidly and weigh nearly half a pound in 30 days. Their growth is slower for the next 18 months.

Young guinea pigs weighing about one-half pound are desired for many experimental purposes. They reach this weight between 4 and 6 weeks of age.

An adult male may weigh 1¾ to 2½ pounds. Unbred females are usually about 2 ounces lighter than males at 18 months of age.



39263–B

Long-haired guinea pig.

Health

When guinea pigs have a rough coat, lack appetite, or lose weight rapidly, a disease is probably the cause. Because many of the symptoms of diseases that affect guinea pigs are similar, even a trained person may have difficulty distinguishing one of the diseases from another.

Your veterinarian can recommend the best measures to control and eradicate disease.

Sulfa drugs or antibiotics can be used in treating most of the infectious diseases that affect guinea pigs. These drugs should be used only with professional advice; incorrect dosages can injure your animals.

Sometimes prompt slaughter of all affected or exposed animals is the best procedure. Burn the carcasses or bury them deeply. Burn all litter and disinfect the animals' quarters.

Use one of the commercially available disinfectants that contain cresol. These disinfectants can be obtained at most drugstores.

Disease Prevention

You can do several things to guard against outbreaks of disease.

- Wash guinea pig cages periodically.
- Disinfect the cages with cresol.
- Feed animals an adequate diet free of contamination by rats or mice.
- Offer fresh drinking water daily in clean containers.
- Never transfer water or feed containers from one pen to another.
- Protect your animals from cold, drafts, and too much moisture. At temperatures lower than 65° F., they may get colds and respiratory diseases, such as pneumonia, and the young are born dead or die soon after birth.

If disease breaks out in your guinea pig colony—

- Wait several weeks before obtaining new stock.
- Isolate new animals to prevent exposure of potential carriers and reduce the possibility of introducing disease into a clean colony.

Guide for Mixing Insecticide Dips for Guinea Pigs

Insecticide	Purchased product [1]	Quantity of purchased product to mix with each gallon of water
Korlan	25-percent EC	5 tablespoons (2½ ounces).
	50-percent WP	6 tablespoons (1 ounce).
Lindane	20-percent EC	1 teaspoon.
	25-percent WP	1½ teaspoons.
Malathion	50-percent EC	1 tablespoon.
	25-percent WP	4 tablespoons (1¼ ounces).
Methoxychlor	25-percent EC	5 tablespoons (2½ ounces).
	50-percent WP	6 tablespoons (1 ounce).
Rotenone	Derris or cube root powder (3- to 5-percent rotenone content).	10 tablespoons (2 ounces). [2]

[1] EC=emulsifiable concentrate; WP=wettable powder. These are the usual commercial formulations. If you buy a product of a different strength, use proportionately more or less of it.

[2] Mix with soapy water.

Parasites

Guinea pigs frequently are troubled with lice. Lice may be controlled by dipping or dusting the animals with an insecticide. Insecticides that are effective in controlling lice on guinea pigs are: Methoxychlor, Korlan, lindane, malathion, and rotenone.

If you use any insecticide, keep a careful record listing the insecticide, strength, and date of treatment. Many buyers need this information for planning experiments so the insecticide will not interfere with the results.

Dipping

Dipping is the most effective way to treat guinea pigs for lice. One dipping usually gives good control.

Clean the cages and spray with an insecticide. You can use any of the insecticides recommended for a dip to spray the cages.

Dusting

A dust may be used on guinea pigs, between dippings, to control lice. Any of the commercially prepared dusts that are made for use on dogs, cats, or other pets are safe for guinea pigs.

Dusts containing any of these insecticides may be used on guinea pigs: Lindane, 1 percent; malathion, 4 percent; rotenone (use either derris or cube root powder), 3 to 5 percent.

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Each year the U.S. Department of Agriculture receives thousands of requests for information about raising small animals. In an effort to comply with these requests efficiently, the Department has prepared a series of publications on the animals that are most frequently the subject of inquiry. This leaflet is one of the series.

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Prepared by

ANIMAL HUSBANDRY RESEARCH DIVISION

AGRICULTURAL RESEARCH SERVICE

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